朝 比 奈 泰 彦*: 地 衣 類 雑 記 (§188-189)

Yasuhiko ASAHINA*: Lichenologische Notizen (188-189)

§ 188. **Physma hondoanum** Asahina, sp. nov.

Hypothallus valde evolutus, niger. Thallus squamosus, squamis magnitudine 1-3×4-10 mm, madefacte 0.2-0.3 mm crassis, uno latere marginis ad corticem arborum affixus, altero latere ascendentibus, horizontaliter dispositis et verticaliter imbricatis, marginibus noduloso-crenulatis, crenulis tumidis, albo-circumdatis, ceterum laevigatis, umbrinis, saepe longitudinaliter rugulosis. Thallus in sectione ecorticatus, superne flavus, intus decolor, hyphis 2.5 μ latis, laxe contextis, homoeomericus, gonidia nostocacea, cellulis 3-5 μ latis, moniliformi junctis, lineari-flexuosa (non in vagina gelatinosa glomeruloso sita), inferne etiam ecorticatus, rhizinis ± 3 μ latis, coerulescentibus munitus.

Apothecia sessilia 2-6 mm lata, parmelioidea, non raro flexuosa, margine

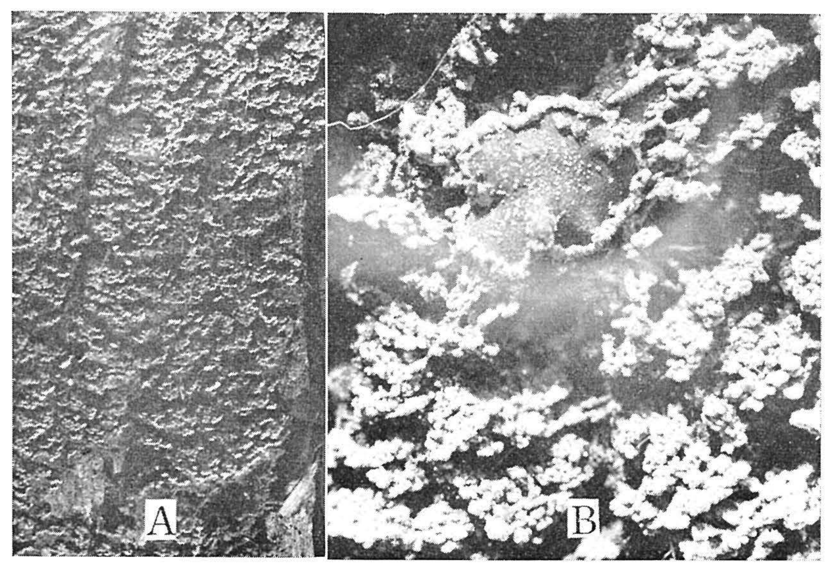


Fig. 1. *Physma hondoanum* Asahina. A. Colony of thalline squamules. × 2. B. Ditto with an apothecium. × 7. (Photo. by M. Nuno).

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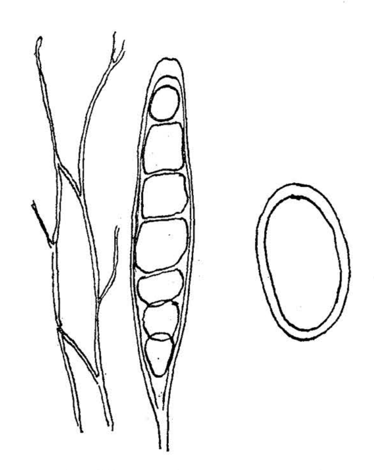


Fig. 2. *Physma hondoanum* Asahina. Paraphyses, an ascus and a spore.

crenulato; epithecium flavofuscescens; hymenium 100–120 μ altum, decolor, I tarde leviter coerulescens; hypothecium 60–80 μ latum, hyphis crebre contextis fere decolor; excipulum proprium 80–90 μ latum, subparenchymaticum, cellulis rotundatis, pachydermaticum; paraphyses filiformes, ramoso-connexae. Pycnidia non visa. Reaction; th. K —; med. C—, KC—, P—.

Specimens examined: Herb. Asahina. Typus: no. 33723. Mt. Kobushi, Prov. Musashi. 23,7, 1933. leg. Y. Asahina; no. 26208. Mt. Koya, Prov. Kii. 8, 2, 1926. leg. Y. Numajiri; no. 60828. Mt. Kimpu, Prov. Shinano. 25,8, 1960. leg. Y. Asahina et alia.

Hypothallus well developed, bluish black. Thallus squamose (not foliose), horizontally attached to the substratum and vertically imbricate; free margin ascending, crenulate, crenulae tumid, often white marginate. Decorticate on both sides, medulla colorless except yellow superficial zone, homoeomerous, nostoc gonidia uniformly distributed within the mucilage, medullary hyphae loosely interwoven. Apothecia sessile, medium sized, parmelioid, margin crenulate, asci 8-spored in 1 row, spores ellipsoid 11–17 ×8–10 μ, membrane ± 2 μ thick.

This species remained hitherto unnoticed in the lichen flora of Japan. During my search for socalled *Pannaria gemmascens* Nyl. among *Pannaria coeruleobadia* specimens, I have recognized its occurrence and distinguished from *Pannaria gemmascens* Nyl.

§ 189. **Physma gemmascens** (Nyl.) Asahina, comb. nov.

Pannaria gemmascens Nyl. Lich. Japon. 36, 1890.

Collema gemmascens (Nyl.) Hue in Journ. de Bot. **20**: 9, 1906.

Hypothallus well developed, bluish black. Thallus foliaceus, irregularly laciniate, laciniae up to 5 (–10) mm broad, variously crenate lobate, dull leather brown, parallelly veined, margins isidiose, isidia subglobose, 0.5–1.0 mm wide, caesious, underside black in the centre, light brown towards the margin. Decorticate on both sides, medulla homoeomerous, near the surface tinged

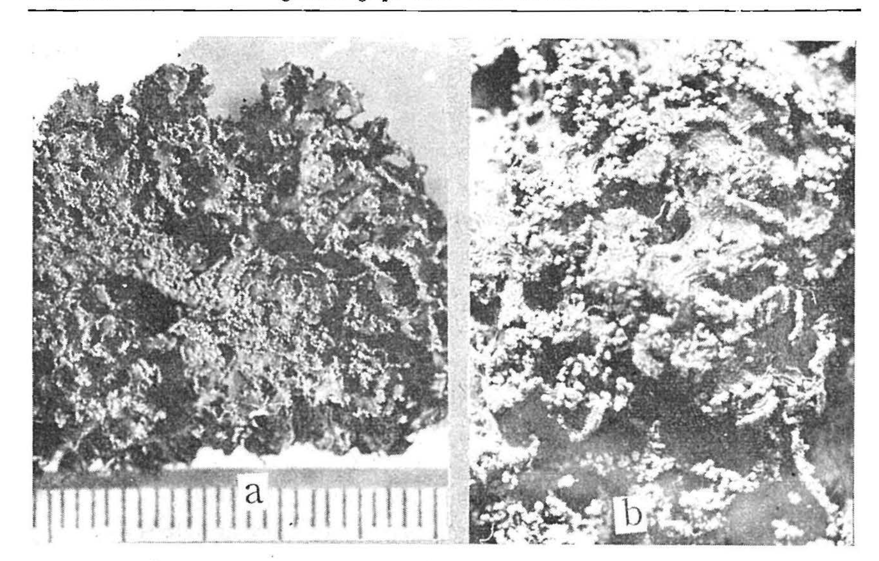


Fig. 3. *Physma gemmascens* (Nyl.) Asahina. a. Thallus on moss.×2. b. Ditto.×7. (Photo. by M. Nuno).

yellow, medullary hyphae 2.5 μ thick, loosely interwoven, inferior part of the medulla with brownish hyphae, horizontally running and often diverging to rhizins. Gonidia nostocacea, linear, flexuose, distributed uniformly in the medulla. Apothecia and pycnidia not seen. Th. & med. K—, P—.

Specimens examined: Herb. Univers. Helsingiensis no. 31263. Magajesi-Itjigome, Japonia. 1879. (Vega); Herb. Univers. Kyotoensis No. 5198. Kinkwasan 2,6, 1902. leg. U. Faurie; no. 6011 Arima 14,4, 1903. leg. U. Faurie; Herb. Asahina no. 2210. Ashitaka, Prov. Suruga, Oct. 1922. leg. Y. Asahina; no. 33701, Hanano-ego, Yakushima Isl. 27,7, 1933. leg. F. Fujikawa; No. 52601. Sanjôgadake, Mt. Ōmine, Prov. Yamato. 10,6, 1952. leg. M. Togashi, All among mosses on barks.

Any one, who reads the Nylander's rather short description of *Pannaria gemmascens* Nyl., he will imagine a specimen closely resembling *Pannaria coeruleobadia* Mass., a very common species in Japan. In 1906, Hue identified, without consulting original specimen, a specimen likewise sterile, collected by Faurie (no. 5198) in Kinkwasan near Sendai, with *Pannaria gemmascens* Nyl. and, at the same time, he transferred it to *Collema*. To test Hue's opinion

I have examined Nylander's specimen[1] *Pannaria gemmascens* collected by Almquist in Itigome-umagayesi and found Hue's assumption was correct.

At a glance this "Vega" specimen reminds us of *Pannaria coeruleobadia* Mass., especially by the marginal caesious isidia and by the well developed bluish black hypothallus. But the thallus is parallelly veined and its medulla is P—. Furthermore the socalled *Pannaria gemmascens* has no cortex on the both sides and the medulla is homoeomerous, i. e. *Nostoc* filaments is not included in glomerules arranged directly inside of cortex, but is uniformly distributed within medullary mucilage. By further examination of Faurie's collection preserved in the herbarium of Kyoto University, I could ascertain no. 6011 (Arima prope Osaka. 14, Apr. 1903) belongs also to *Pannaria gemmascens* Nyl., though Hue himself reckoned it among *Pannaria rubiginosa* var. *coeruleobadia*. Also among 35 specimens tentatively called *Pannaria coeruleobadia* and preserved in the writer's herbarium, I could pick out 3 specimens identical with socalled *Pannaria gemmascens* Nyl. As these specimens are all sterile, it is difficult to settle their generic position with certainty. At present, on account of striking morphological similarity to the preceding species, I prefer "*Physma*" to either *Pannaria* or *Collema*.

Pannaria coeruleobadia	*Physma gemmascens*	*Physma hondoanum*
Th. foliaceous, laciniate, margin isidiose, caesious; surface glabrous, corticate.	Th. foliaceous, laciniate, margin isidiose, caesious; surface decorticate, ± rugose.	Th. squamose, vertically imbricate, margin tumid crenulate, surface decorticate, ± rugose.
medulla heteromerous, P+brownish yellow.	medulla homoeomerous, P—.	medulla homoeomerous, P—.

Pannaria gemmascens Nyl. の詮索——日本の地衣フローラとしての最初の出版物である Nylander 著 Lichenes Japoniae (1890) の p. 36 に表題の新種が記載されて居る。この書物の慣例であるように記載文は極めて簡単で決め手を把握するのは困難であり，漠然と日本に多産する *Pannaria coeruleobadia* Mass. (=*P. rubiginosa* Del. v. *coeruleobadia* Schwend. 一名 v. *lanuginosa* A. Zahlbr.) に甚だ似寄ったものの感を起させるに過ぎないので，筆者も永い間割り切れない気持で居たが，今から 20 年

1) I wish to express my cordial thanks to Dr. H. Roivainen (Helsinki) who was so kind enough to send me the "Vega" specimen in question on loan.

或はもっと前だったかとも思うが Hue の文献を漁っていた所，Hue 自身もこの種に興味を持っていたらしく Faurie の日本採集地衣標本を鑑定した際，其の no. 5198 (Kinkwasan 金華山 2. Juni 1902) を捕へて之を *Pannaria gemmascens* と同定し，而も彼自身 Nylander の標本を見て居らないに不拘この大胆な断定を行い且つ其所属を *Collema* に移したのである。筆者は近頃自分の腊葉庫にある *Pannaria* 属の標本を整理する必要に迫られたので京都大学腊葉室に所蔵してある Hue の鑑定した Faurie 標本中の *Pannaria* 属と *Collema* の中から Hue の所謂 *Collema gemmascens* (Nyl.) Hue no. 5198 を借覧した[2)]。この最後の標本は 3.0×1.5 cm 位の破片で，外貌は予想通り *P. coeruleobadia* に似ているが，葉体は無皮層で混層体であり又 P— の反応を現し *coeruleobadia* が有皮層，異層地衣で P+ の反応があるのと異る。そこで是非共 Nylander の原標本が見たくなったので Helsinki 大学腊葉館に所蔵してある筈の "Vega" コレクションからの標本の借用を申込んだ所 Dr. Roivainen の好意で，昭和 37 年 12 月 1 日に 6 箇の *Pannaria* 属とそれに近い属の標本が届いた。其内の一つは永い年月の間筆者の頭の中に色々の image となって現れた待ち焦れた品物であった。この標本の番号は Herb. Univers. Helsingiensis no. 31263 で包紙には Japonia. Magajesi-Itjigome. E. Almquist 1879 (Vega) とあり，紛ふかたなき富士西口馬返と一合目間で Vega 号乗組の地衣学者 Almquist が採集したものである。この標本も Faurie 5198 に劣らず貧弱で径 1.5 cm 位の断片であり，其半分位は別の地衣が夾雑して居る。然し之をよく検すると *Pannaria coeruleobadia* に似ては居るが同一品ではなく而も Faurie の金華山産標本とは同一であることを突き止めた。尚多数の Faurie 標本の中で no. 6011. *Pannaria rubiginosa* var. *coeruleobadia* (Arima 有馬? 14 April 1903) とあるものが矢張り *Pannaria gemmascens* Nyl. と同一種であることを知った。これで見ると Hue 自身も一旦はこの種を *coeruleobadia* と間違へた時代もあったことが判る。他方筆者は自分の腊葉庫中にある *Pannaria coeruleobadia* として居る標本約 40 箇を検して正に *gemmascens* と同定すべきもの 3 個を拾い出した。そこで *gemmascens* の所属の問題となるが Vega 標本，Faurie 標本及び筆者の標本何れも無子器で属の決め手がない。然し一方に筆者が少し以前に *Pannaria* 属標本中に混入して居たもので有子器のものを *Physma* 属に入れ之を *Physma hondoanum* と命名したものがあるが，これと *gemmascens* とは葉体の構造が全く一致しているので同属と見做し *Physma gemmascens* (Nyl.) Asahina と呼ぶことにした。昔，Nylander が不完全な Vega 標本 31263 を *Pannaria coeruleobadia* と区別した慧眼もさることながら Hue が仮令へ初めは幾分の誤解もあったにしろ金華山標本 no. 5198 を Nylander の *gemmascens* と同一なりと直感したのは流石にヴェテランと云へよう。

2) この便宜を与へられた京都大学の田川博士に感謝を表します。